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OM protein - protein search, using BW model

Run on: March 6, 2006, 14:43:28 ; Search time 48 Seconds  
(without alignments)

1278.028 Million cell updates/sec

Title: US-10-090-215-12

Perfect score: 3858

Sequence: 1 MADSSSEGPRAGPGEVAELFGC.....GOVSKEKSHIWLQSGRRRL 742

Scoring table: BLOSUM62

Gapext 10.0 , Gapext 0.5

Searched: 572060 seqs, 82775679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing First 45 summaries

Database : Issued Patents AA:  
 1: /cgnd\_6/pctodata/1/iaa/5\_COMB.pep:  
 2: /cgnd\_6/pctodata/1/iaa/6\_COMB.pep:  
 3: /cgnd\_6/pctodata/1/iaa/H\_COMB.pep:  
 4: /cgnd\_6/pctodata/1/iaa/PCTOS\_COMB.pep:  
 5: /cgnd\_6/pctodata/1/iaa/R\_COMB.pep:  
 6: /cgnd\_6/pctodata/1/iaa/backfile1.pep:  
 \*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query	Match	Length	DB ID	Description
1	3858	100.0	742	2	US-09-500-123-12	Sequence 12, Appl
2	3823	99.1	871	2	US-09-500-123-7	Sequence 7, Appl
3	89.9	811	2	US-09-500-123-9	Sequence 9, Appl	
4	1604.5	41.6	843	2	US-09-235-451-25	Sequence 25, Appl
5	1604.5	41.6	843	2	US-09-918-303-25	Sequence 25, Appl
6	1579.5	40.9	838	2	US-09-235-451-2	Sequence 2, Appl
7	1579.5	40.9	838	2	US-09-132-316-3	Sequence 3, Appl
8	1579.5	40.9	838	2	US-09-667-422-9	Sequence 9, Appl
9	1579.5	40.9	838	2	US-09-978-303-34	Sequence 2, Appl
10	1579.5	40.9	838	2	US-10-246-435-9	Sequence 9, Appl
11	1579.5	40.9	838	2	US-10-137-316-3	Sequence 3, Appl
12	1555.5	40.4	839	2	US-09-197-636-2	Sequence 2, Appl
13	1555.5	40.3	839	2	US-09-197-636-8	Sequence 8, Appl
14	1555.5	40.3	839	2	US-09-235-451-34	Sequence 34, Appl
15	1555.5	40.3	839	2	US-09-978-303-34	Sequence 2, Appl
16	1555.5	40.3	839	2	US-09-533-2220A-2	Sequence 2, Appl
17	1555.5	40.3	839	2	US-09-943-016-6937	Sequence 6937, Appl
18	1555.5	40.3	839	2	US-10-128-853-2	Sequence 2, Appl
19	1555.5	40.2	839	2	US-09-197-636-4	Sequence 4, Appl
20	1555.5	40.2	839	2	US-09-667-422-4	Sequence 4, Appl
21	1375.6	40.2	839	2	US-10-246-435-4	Sequence 2, Appl
22	1375.6	35.6	798	2	US-09-949-016-9926	Sequence 9926, Appl
23	1324	34.3	761	2	US-09-235-451-4	Sequence 4, Appl
24	1324	34.3	761	2	US-09-978-303-4	Sequence 4, Appl
25	1306	33.9	889	2	US-09-132-316-2	Sequence 2, Appl
26	1306	33.9	889	2	US-10-137-316-2	Sequence 2, Appl
27	1298.5	33.7	764	2	US-09-235-451-36	Sequence 36, Appl

## ALIGNMENTS

RESULT 1  
US-09-500-123-12

; Sequence 12, Application US/09500123

; Patent No. 6155278

; GENERAL INFORMATION:

; APPLICANT: Dubin, Adrienne E

; APPLICANT: Ruvar, Arne

; APPLICANT: Glass, Charles A

; TITLE OF INVENTION: DNA encoding Isoforms of the human Vanilloid Receptor

; FILE REFERENCE: Human VR3 receptors

; CURRENT APPLICATION NUMBER: US/09/500,123

; CURRENT FILING DATE: 2000-02-08

; NUMBER OF SEQ ID NOS: 17

; SEQ ID NO: 12

; TYPE: PRT

; ORGANISM: Homo sapiens

; SOFTWARE: PatentIn Ver. 2.1

US-09-500-123-12

Query Match Score 3858; DB 2; Length 742;

Best Local Similarity 100 %; Pred. No. 0;

Matches 742; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MADSSSEGPRAGPGEVELPGDESGTPGBARPLSSLANLFFGEDGSILSPSPADASRPAGP 60

Db 1 MADSSSEGPRAGPGEVELPGDESGTPGBARPLSSLANLFFGEDGSILSPSPADASRPAGP 60

Qy 1 MADSSSEGPRAGPGEVELPGDESGTPGBARPLSSLANLFFGEDGSILSPSPADASRPAGP 60

Db 1 MADSSSEGPRAGPGEVELPGDESGTPGBARPLSSLANLFFGEDGSILSPSPADASRPAGP 60

Qy 61 GDGRPNLRMKQGAFRKGVNPIDLILESTLYESSVTPGPKKAPMDLFQDGTYRHSSDN 120

Db 61 GDGRPNLRMKQGAFRKGVNPIDLILESTLYESSVTPGPKKAPMDLFQDGTYRHSSDN 120

Qy 121 KRWKRKLIKEQPKQSPAKAPOPPTIKVFRNPILPFTVSRQSTDADGLPFLLTTRKRL 180

Db 121 KRWKRKLIKEQPKQSPAKAPOPPTIKVFRNPILPFTVSRQSTDADGLPFLLTTRKRL 180

Qy 181 TDEEEFPSTGKTCLPKALLNSNGNDTIVLDAERTGNMREPIINSPRDIYRGQT 240

Db 181 TDEEEFPSTGKTCLPKALLNSNGNDTIVLDAERTGNMREPIINSPRDIYRGQT 240

Qy 241 ALHIAERRCKHYVLLVQAQDVHQAARGRFQPKDEGGFYFGELPLSLAACTNQPHI 300

Db 241 ALHIAERRCKHYVLLVQAQDVHQAARGRFQPKDEGGFYFGELPLSLAACTNQPHI 300

Qy 301 VNYLTENPHKCADMRQDSRNTVLHALVATADNTENTKVTKYDILLKCARLPDS 360

Db 301 VNYLTENPHKCADMRQDSRNTVLHALVATADNTENTKVTKYDILLKCARLPDS 360

Qy 361 NLEAVLNNDGLSPIMMAAKTGKIGIPOHIIREVTDDETRHLRSRKFDWAVGPVYSSLYD 420  
 Db 361 NLEAVLANDGLSPIMMAAKTGKIGIPOHIIREVTDDETRHLRSRKFDWAVGPVYSSLYD 420  
 Qy 421 LSSLDTGCEASVLELIVYNSKLENHEMLAVEPINELLDRWKRGAVASPYINVSYLC 480  
 Db 421 LSSLDTGCEASVLELIVYNSKLENHEMLAVEPINELLDRWKRGAVASPYINVSYLC 480  
 Qy 481 ANVIFTLTAYCOPLEGTPPPYRRTVDYLRLAGEVITLTGYLEFTTNIKIDLFMCKCPGV 540  
 Db 481 ANVIFTLTAYCOPLEGTPPPYRRTVDYLRLAGEVITLTGYLEFTTNIKIDLFMCKCPGV 540  
 Qy 541 NSLFIDGSFOLLYFISVLYVVAALYLAGIEAYLAVMFALVGMNNAFYTRGKLKG 600  
 Db 541 NSLFIDGSFOLLYFISVLYVVAALYLAGIEAYLAVMFALVGMNNAFYTRGKLKG 600  
 Qy 601 TYSIMIQKILFKDLFRFLVYLLFMIGYASALSVLNPCKANNVCNEDQINCTVPTPSC 660  
 Db 601 TYSIMIQKILFKDLFRFLVYLLFMIGYASALSVLNPCKANNVCNEDQINCTVPTPSC 660  
 Qy 661 RDSETFSTFLDLFLKLTIGMDLEMISSTKYPVVFILLTYTLLTEFLVLLNMLALMG 720  
 Db 661 RDSETFSTFLDLFLKLTIGMDLEMISSTKYPVVFILLTYTLLTEFLVLLNMLALMG 720  
 Qy 721 TVGQVSKEBSKH1WKLQSGRRRL 742  
 Db 721 TVGQVSKEBSKH1WKLQSGRRRL 742

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RESULT 2  
 US-09-500-123-7  
 ; Sequence 7, Application US/09500123  
 ; Patent No. 6455278

; GENERAL INFORMATION:  
 ; APPLICANT: Dubin, Adrienne E  
 ; APPLICANT: Huvar, Anne  
 ; APPLICANT: Brlander, Mark G  
 ; APPLICANT: Glass, Charles A  
 ; TITLE OF INVENTION: VR3  
 ; FILE REFERENCE: Human VR3 receptors  
 ; CURRENT APPLICATION NUMBER: US/09/500,123  
 ; CURRENT FILING DATE: 2000-02-08  
 ; SEQ ID NOS: 17  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 7  
 ; LENGTH: 871  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; US-09-500-123-7

Query Match Score 99.1%; Score 3823; DB 2; Length 871;  
 Best Local Similarity 99.9%; Pred. No. 0; Mismatches 0; Indels 0; Gaps 0;  
 Matches 735; Conservative

Qy 1 MADSSSEGPRAGGEVAELPGDSEGTGPEAVPLSLANLFGEDGSLSPPADASRPAGP 60  
 Db 1 MADSSSEGPRAGGEVAELPGDSEGTGPEAVPLSLANLFGEDGSLSPPADASRPAGP 60  
 Qy 61 GDGRPNLRMKFOGAFRKGVNPIDLLESTLYESSVYGPCKAPMDSLFDGTYRHSSDN 120  
 Db 61 GDGRPNLRMKFOGAFRKGVNPIDLLESTLYESSVYGPCKAPMDSLFDGTYRHSSDN 120  
 Qy 121 KWRKKKIEKQPOSPKAPAPQPPLKVKNPIDLLESTLYESSVYGPCKAPMDSLFDGTYRHSSDN 180  
 Db 121 KWRKKKIEKQPOSPKAPAPQPPLKVKNPIDLLESTLYESSVYGPCKAPMDSLFDGTYRHSSDN 180  
 Qy 181 TDDEPRPSTGTCLPKALNLSNGRNTIPVLLDAERTGMREFINSPPRDIVYRGQT 240  
 Db 181 TDDEPRPSTGTCLPKALNLSNGRNTIPVLLDAERTGMREFINSPPRDIVYRGQT 240  
 Qy 241 ALHIAERRKHYVELLAQAGDVHAQARGRFFQPKDREGGYFYFGLPLSAACTNQPHI 300  
 Db 241 ALHIAERRKHYVELLAQAGDVHAQARGRFFQPKDREGGYFYFGLPLSAACTNQPHI 300

Qy 301 VNYLJPNPHKKADMBRQDSRGNTVHLAVALADNTRENTKFUTOMYDLJLKCARLPFDS 360  
 Db 301 VNYLJPNPHKKADMBRQDSRGNTVHLAVALADNTRENTKFUTOMYDLJLKCARLPFDS 360  
 Qy 361 NLEAVLNNDGLSPIMMAAKTGKIGIPOHIIREVTDDETRHLRSRKFDWAVGPVYSSLYD 420  
 Db 361 NLEAVLNNDGLSPIMMAAKTGKIGIPOHIIREVTDDETRHLRSRKFDWAVGPVYSSLYD 420  
 Qy 421 LSSLDTGCEASVLELIVYNSKLENHEMLAVEPINELLDRWKRGAVASPYINVSYLC 480  
 Db 421 LSSLDTGCEASVLELIVYNSKLENHEMLAVEPINELLDRWKRGAVASPYINVSYLC 480  
 Qy 481 AMVIFTLTAYQPLFQPYRRTVDYLRLAGEVITLTGYLEFTTNIKIDLFMCKCPGV 540  
 Db 481 AMVIFTLTAYQPLFQPYRRTVDYLRLAGEVITLTGYLEFTTNIKIDLFMCKCPGV 540  
 Qy 541 NSLFIDGSFOLLYFISVLYVVAALYLAGIEAYLAVMFALVGMNNAFYTRGKLKG 600  
 Db 541 NSLFIDGSFOLLYFISVLYVVAALYLAGIEAYLAVMFALVGMNNAFYTRGKLKG 600  
 Qy 601 TYSIMIQKILFKDLFRFLVYLLFMIGYASALSVLNPCKANNVCNEDQINCTVPTPSC 660  
 Db 601 TYSIMIQKILFKDLFRFLVYLLFMIGYASALSVLNPCKANNVCNEDQINCTVPTPSC 660  
 Qy 661 RDSETFSTFLDLFLKLTIGMDLEMISSTKYPVVFILLTYTLLTEFLVLLNMLALMG 720  
 Db 661 RDSETFSTFLDLFLKLTIGMDLEMISSTKYPVVFILLTYTLLTEFLVLLNMLALMG 720  
 Qy 721 TVGQVSKEBSKH1WKLQSGRRRL 736  
 Db 721 TVGQVSKEBSKH1WKLQSGRRRL 736

RESULT 3  
 US-09-500-123-9  
 ; Sequence 9, Application US/09500123  
 ; Patent No. 6455278

; GENERAL INFORMATION:  
 ; Sequence 9, Application US/09500123  
 ; General Information:  
 ; Patient No. 6455278  
 ; APPLICANT: Dubin, Adrienne E  
 ; APPLICANT: Huvar, Anne  
 ; APPLICANT: Brlander, Mark G  
 ; APPLICANT: Glass, Charles A  
 ; TITLE OF INVENTION: DNA encoding Isoforms of the human Vanilloid Receptor  
 ; TITLE OF INVENTION: VR3  
 ; FILE REFERENCE: Human VR3 receptors  
 ; CURRENT APPLICATION NUMBER: US/09/500,123  
 ; CURRENT FILING DATE: 2000-02-08  
 ; SEQ ID NOS: 17  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 9  
 ; LENGTH: 811  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; US-09-500-123-9

Query Match Score 89.9%; Score 3470; DB 2; Length 811;  
 Best Local Similarity 91.7%; Pred. No. 0; Mismatches 0; Indels 60; Gaps 1;  
 Matches 675; Conservative

Qy 1 MADSSSEGPRAGGEVAELPGDSEGTGPEAVPLSLANLFGEDGSLSPPADASRPAGP 60  
 Db 1 MADSSSEGPRAGGEVAELPGDSEGTGPEAVPLSLANLFGEDGSLSPPADASRPAGP 60  
 Qy 61 GDGRPNLRMKFOGAFRKGVNPIDLLESTLYESSVYGPCKAPMDSLFDGTYRHSSDN 120  
 Db 61 GDGRPNLRMKFOGAFRKGVNPIDLLESTLYESSVYGPCKAPMDSLFDGTYRHSSDN 120  
 Qy 121 KWRKKKIEKQPOSPKAPAPQPPLKVKNPIDLLESTLYESSVYGPCKAPMDSLFDGTYRHSSDN 180  
 Db 121 KWRKKKIEKQPOSPKAPAPQPPLKVKNPIDLLESTLYESSVYGPCKAPMDSLFDGTYRHSSDN 180  
 Qy 181 TDDEPRPSTGTCLPKALNLSNGRNTIPVLLDAERTGMREFINSPPRDIVYRGQT 240  
 Db 181 TDDEPRPSTGTCLPKALNLSNGRNTIPVLLDAERTGMREFINSPPRDIVYRGQT 240  
 Qy 241 ALHIAERRKHYVELLAQAGDVHAQARGRFFQPKDREGGYFYFGLPLSAACTNQPHI 300  
 Db 241 ALHIAERRKHYVELLAQAGDVHAQARGRFFQPKDREGGYFYFGLPLSAACTNQPHI 300

Qy 181 TDEPRESTGKTCPLKALLNLNGRNRTIPVLDIAERTGMNREPINSPIRDYIYRGT 240  
 181 TDEPRESTGKTCPLKALLNLNGRNRTIPVLDIAERTGMNREPINSPIRDYIYRGT 240  
 241 ALHAIERRCHYVELLAQGADVAQARGRFFPKDEGGYFYGELPLSLAACTNQPHI 300  
 241 ALHAIERRCHYVELLAQGADVAQARGRFFPKDEGGYFYGELPLSLAACTNQPHI 300  
 301 VNYLTENPHKADMRRDOSRGNTVLHALYIAADNTRENTKFVTRMVDLILKCARLFPS 360  
 301 VNYLTENPHKADMRRDOSRGNTVLHALYIAADNTRENTKFVTRMVDLILKCARLFPS 360  
 361 NLEAVLANDGLSPIMMAAKTGTGKTFQHITIREVTDDETRHLSRKFDWAGPYSSLVYD 420  
 361 NLEAVLANDGLSPIMMAAKTGTGKTFQHITIREVTDDETRHLSRKFDWAGPYSSLVYD 420  
 Qy 421 LSSLDTCGBEASYLEIVLYNSKTCENRHMLAVEPINELLRDKWRKGAVSYINVSTLC 480  
 382 :-----K-ENRHMLAVEPINELLRDKWRKGAVSYINVSTLC 420  
 Db 481 AMVIFTLTAYQPLEGTPPYRTTVDYLRLAGEVITLFTGVLFFFTNKDFMKKKCPGV 540  
 421 AMVIFTLTAYQPLEGTPPYRTTVDYLRLAGEVITLFTGVLFFFTNKDFMKKKCPGV 480  
 Qy 541 NSLFIDSGFQLISFQIYSLVIVSALYLAGIBAVLAVMNFALVGWMNAVYFTFGKLKTG 600  
 481 NSLFIDSGFQLISFQIYSLVIVSALYLAGIBAVLAVMNFALVGWMNAVYFTFGKLKTG 540  
 601 TYSIMIQKILFKDLFRFLVYLIFMIGIASLYSVLNPANCANMKVCNEDQINCTVTPSC 660  
 541 TYSIMIQKILFKDLFRFLVYLIFMIGIASLYSVLNPANCANMKVCNEDQINCTVTPSC 600  
 Db 661 RDSETESTFLDLFPLKLTIGMDLEMSSSTKYPVVFILLYTYIILTFTVLLNMLJALMCE 720  
 601 RDSETESTFLDLFPLKLTIGMDLEMSSSTKYPVVFILLYTYIILTFTVLLNMLJALMCE 660  
 Qy 721 TVCQVSKESSHWKLQ 736  
 Db 661 TVCQVSKESSHWKLQ 676  
 Qy 99 ---PKAPMDSLFDY----GTYRHHSNDNRKWRKKIIEKQP---OSPKAPAPOPPPIL 146  
 Db 65 DCDKDAPMDSPYQMDHLMASVVKHANMERGKLHLUSSITGESEA-----P 116  
 Qy 147 KVNRPTILEDVSRGSTDADLGCLPLFLTHKRLTDFERFSTGKTCPLKALLNLNGRNRT 206  
 117 KFYDRRIFDAVARGSTKDLDDLLYLNRTLGHLTDEFKEPTGKTCPLKALLNLHDGK 176  
 Qy 207 NTDTIPVLDIAERTGNREFINSPIRDYIYRGTALHIAERCKHYVELLAQGADYHA 266  
 Db 177 NTDTIPVLDIAERTGNREFINSPIRDYIYRGTALHIAERCKHYVELLAQGADYHA 216  
 Qy 267 QARGRFQPKDEGGYFYGELPLSLAACTNQPHIYKQTAHIAERPNMLYKLVQNGDYHA 325  
 Db 237 RACGEFPRKIKGPG-FYGFELPLSLAACTNQPHIYKQTAHIAERPNMLYKLVQNGDYHA 295  
 Qy 326 HALVAADNTRENTKTFKTMDDLJKCARLPDSNLAEFLANDGLSPIMMAAKTGTGIGI 395  
 Db 296 HTLVEADNTKDNTKPVTKMNNILGAKNPNLKLEELTNKGTLPLTAATKGTGIGI 355  
 Qy 386 FQHIIREVTEDETRHLSRKFDWAGPYVSSYDLSLDTCCBEEASYLEIVLYNSKTCEN 445  
 Db 356 PAYLAREIKOPECRLSRKETEWAGPVHSSYDSCIDTC-EKNSLETTAYSETEPNT 414  
 Qy 446 RHEMLAYPEPINELLRDKWRKGAVSYINVSTLCVMTFTLTYAOPLE--GTPPYPY- 502  
 Db 415 RHEMLAYPEPINELLRDKWRKGAVSYINVSTLCVMTFTLTYAOPLE--GTPPYPY- 502  
 Qy 503 RTTVDVPLLAGREVITLFTGVLFFFTNKDFMKKCPGVNLDFGQFOLYLYFYSVNV 562  
 Db 475 HSTGEYFRVTGEISLTVLGGLYFFFRGQ-YFQQRSSPLKTLIVDYSSEVLFVHSLLJLS 533  
 Qy 563 SAALYAGIEAVLAVMNFALVGWMNAVYFTFGKLKTGYSIMIQKILFKDLFRFLVYL 622  
 Db 534 SVVLYCGQELVYASMSVSLAIGWAMMILYYTRGPQGIYSWIMAKMLRDLCRPMFYI 593  
 Qy 623 LFMIGIYASALVSYLNPANCANMKVCNEDQ-TNCVTPYTPSCRDSETFSET-----FLDLFL 674  
 Db 594 VFLLGISTAVVLLIED-----DNEGDDTNSS-EYARCSDHTKRGRTSYNSLYTCLEBF 645  
 Qy 675 KLTIGMDLEMSSSTKYPVVFILLYTYIILTFTVLLNMLJALMCEGKSKBSKWK 734  
 Db 646 KFTIGMDLEFTENYFREKSVFVLLVYVILTYVLLNMLJALMCEGKSKBSKWK 705  
 ; RESULT 5  
 ; Sequence 25, Application US/09978303  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Julius, David J.  
 ; APPLICANT: Caterina, Michael J.  
 ; APPLICANT: Brake, Anthony J.  
 ; TITLE OF INVENTION: CAPSAICIN ACID SEQUENCES ENCODING  
 ; TITLE OF INVENTION: CAPSAICIN RECEPTOR AND CAPSAICIN RECEPTOR-RELATED  
 ; FILE REFERENCE: 9076/084CIP  
 ; CURRENT APPLICATION NUMBER: US/09/235,451  
 ; CURRENT FILING DATE: 1999-01-22  
 ; PRIORITY APPLICATION NUMBER: 60/072,151  
 ; PRIORITY FILING DATE: 1998-01-22  
 ; PRIORITY APPLICATION NUMBER: 08/915,461  
 ; PRIORITY FILING DATE: 1997-08-20  
 ; NUMBER OF SEQ ID NOS: 48  
 ; SOFTWARE: FASTSEQ For Windows Version 3.0  
 ; SEQ ID NO 25  
 ; LENGTH: 843  
 ; TYPE: PRT  
 ; ORGANISM: chicken  
 ; Query Match Similarity 41.6%; Score 1604.5; DB 2; Length 843;  
 ; Best Local Similarity 47.5%; Pred. No. 1.5e-143;  
 ; Matches 343; Conservative 128; Mismatches 184; Indels 67; Gaps 18;  
 ; Query 41 EGRDGSISSPSPADASRPAGPDPGRNPKMFOGAFRKGVNPIDOLESTY--ESSVVPG 98  
 ; Db 27 DGDSAL---BTAD-----NLOGTF-----  
 ; Software: FastSEQ for Windows Version 4.0  
 ; SEQ ID NO 25  
 ; Prior Filing Date: 1999-01-22  
 ; Prior Application Number: 60/072,151  
 ; Prior Filing Date: 1998-01-22  
 ; Prior Application Number: 08/915,461  
 ; Prior Filing Date: 1997-08-20  
 ; Number of Seq ID Nos: 48

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LENGTH: 843  
 TYPE: PRT  
 ORGANISM: chicken  
 US-09-978-303-25

Query Match 41.6% Score 1604.5; DB 2; Length 843;  
 Best Local Similarity 47.5%; Pred. No. 1.5e-143; Gaps 18;  
 Matches 343; Conservative 128; Mismatches 184; Indels 67;

Qy 41 EGRDGSISSPSPADASRPGPGDGRGPNULRMKEQAFRGVNPIDLSTLY--ESSVPG 98  
 Db 27 DGDGSAI--ETAD-----NLQGTF---SNKVQPSNSNIPARRGRFVMG 64  
 Qy 99 ---PKKAPMDSLEDY----GTYRHSSSDNKRWKLLIEKOP---QSPKAQAPQQPPIL 146  
 Db 65 DCDDKMAPMDSYQMDHMAPSVIKFIAANMERGKLHKLLSTDTSITGCKSEA-----F 116  
 Qy 147 KVENRPLFDIVSRGSTADLDGLPFLTHKCRLLTDDEFRPSTGKTCPLKALLNLNSNGR 206  
 Db 117 KFYDRRKIIFDAVARGSTKDLDLLYLNRTXLKHLTDDEKEPETGKICLKKAMLNHDGK 176  
 Qy 207 NTIPVLLDIAERTGMNREFINSPSPRFDTYRQCTALHIAIERCRKHYVELLYAQGADVHA 266  
 Db 177 NTIPVLLDIAERTGMNREFINSPSPRFDTYRQCTALHIAIERCRKHYVELLYAQGADVHA 236  
 Qy 267 QARGRFFOP--KDEGGYFYFGELPLSLAACTNPHIINYLTENPHKADMMRQDSDRGNVT 325  
 Db 237 RACGEFFRKIKSKPG--FYFGELPLSLAACTNQLCIVKFLENPYQADIAEDSMGNMVT 295  
 Qy 326 HALVATADNTRNTKFVTKYMDLILKCARLPDSNLEAVNLNDGLSPLMMAAKTGSKIGI 385  
 Db 296 HTLVEIADNTRDNTKFTVKYMTANILGAKINPILKEELTNKGKGLTPLTLAAKTGKIGI 355.  
 Qy 386 FOHTIREBUTDEDTRHLSRKFKDWAQPVYSSYLSDSSLIDCGEEASVLELIVNSKIEI 445  
 Db 356 PAYLTEREIKODECRHLSRKFKETEWQPVHSSLYDLSIDCTC-EKNSVLETTIAYSETPN 414  
 Qy 446 RHEMLAVEPINELLRDWKRFKGAWSFVINWVSYLCAMVIFTAYQPLI--GTPPYV- 502  
 Db 415 RHEMLIVEPLNRLQDKWDRFVGHLYFNFFVYIAITHISLTTAAYRPVQGDKPFPAFG 474  
 Qy 503 RTTVDYIQLRAGAVTILEPTGVLFVFFNTIKDLFMKKCPGVNSLFTDGSQFLQYIYSLVIV 562  
 Db 475 HSTGEYFRVTEBILSVLGGLYFFERGIO-YFVQRREPSLSKLTIVDVSSEVLFVHSLLLS 533  
 Qy 563 SAALYLAGEIAVLAVMVFAVLGWMNIALYFTRGLKLTGTYSIMQKILFKDLEFLVYL 622  
 Db \* 534 SVLVYFGQELTVASWVFSALGWANMLYTRGFQONGIYSMIAKMLDLCRMFVYL 593  
 Qy 623 LPMIGYASALVSLNPCANNMKVCNEDQ-TINCTVTPYPSRCSETTEST-----FLIDLP 674  
 Db 594 VFLLGFTSTAATLIED----DNEGQDTNSS--EVARCHTTRGRTSYNLYTTCLELP 645  
 Qy , 675 KFTIGMDLEMISUSTKYPVVFILLTYYIILTFLVLLNMALMGETVQGVSKESKHIWK 734  
 Db 646 KFTIGMDLETTENYRFKSFWFVLLVLYVLLTYYIILLNMALMGETVSKIAQESKSIWK 705  
 Qy 735 LQ 736  
 Db 706 LQ 707

Qry Match 40.9% Score 1579.5; DB 2; Length 938;  
 Best Local Similarity 44.8%; Pred. No. 3.6e-141;  
 Matches 338; Conservative 129; Mismatches 193; Indels 97; Gaps 16;

Qy 16 AELPGESGCTPGGE-----APPLSLANLEPEGDGSLS9SPADA 54  
 5 ASLDSESESESPQENSCLDPPDRDNICKPMDSPVPPKPKHPTTSRTRIF-GKEDSBEBSPLDC 63  
 Db 55 SRPAGGDDGRGNLNRMKFQGAFRKGIVN-PIDLBESTLYESSVVPGPKPKAMDSLFDYGTY 113  
 Qy 64 PYEEG-----GLASCPLITVSSV---TQRPDGDP-----ASV 94  
 Qy 114 RHSSPDNCWRKCKLIEKOPSKAPDOPPPPLKVNPRPLFDIVSRGSTADLDGULPFL 173  
 Db 95 RPSSQPS-----VZAGEKEP--RLYDRRSIFDAVQSNCQELESLLPFL 136  
 Qy 174 LTHKGRLTDEFREPSTGKTCPLKALLNLNSGNDTIPULLDIAPRTGNNRPEFTNSPFRD 233  
 Db 137 QRSKGRLTDSSEFKDPTGKTCPLKALLNLNSGNDTIPULLDIAPRTGNNRPEFTNSPFRD 233  
 Qy 234 IYRGGTALHIAERCRKHYVELLYAQGADVHAQARQGRFPQDKEGGYFYFGBELPLSAA 293  
 Db 197 SYKGOTALHIAERERNMVTLYLVEANGDVQAANGDFPKTKTGRPGFYFGBELPLSAA 256  
 Db 294 CTNOPIHVNLTENPHKKADMRRQDSRGNTVTHALVAIAADNTRNTKFVTKYMDLILKC 353  
 Qy 257 CTNQIQLVKFELQNSRQPADISARDUSGNTVTHALVEADNTVDNTKFTVTSMYNEILIGL 316  
 Db 354 ARLFPSNLLEAVLNNDGLSPLMMAAKTGSKIGIIFOHQIIRREVTDDETRHLSRKFKDWAQGP 413  
 Db 317 AKLHPPTKLERITNKGKLTPLAALSQKGKLVAYLQLORTHEPCRHLRSRKFEWAYGP 376  
 Qy 414 VYSSLVDLSSLDTCGEASVLELIVY-NSKIEHMLAEVPLNLLDRWKFGAVSFY 472  
 Db 377 VHSSLYDLSCLCDTC-EKNSVLEVIASSSETPNRHDMLLVEPLNLLQDKWDRFKRIFY 435  
 Qy 473 INVSVYLCANVIFTLTAYTOPLEGTPYPRRTV-DYLRLAGEVITLFTSVLUFFETNIKO 531  
 Db 436 FNFFVYCLMLIFTAAAYRPVEGQPYKURNTVSDYFRTGTEILSVSGVYFFRGQI-Q 494  
 Qy 532 LFMKKGPGVNSLFDQGQOLLYFVSYLVTIVSAALEYLAGIEAYLAVMVEALVGMMNAY 591  
 Db 495 YFLOPRTPLSLEPSLFDVSYSEBFVQSLFVMSVYLFQSORKKEYASMVFLAMGHTNMLY 554  
 Qy 592 FTRGLKLGTGYSIMIQKILFKDLPFLLYLFLPMIGYASALVSLNPCANNMKVCNEDQTN 651  
 Db 555 YTRGPQMQGIYAVMIEKMLDLCRMFVYLVEFLGFTSAVTLI-----EDGKN 604  
 CTPV--TYPSCRDS-----ETSTFLDILFKLTIGMDLEMSSTKYPVVFILL 699  
 NSLPMESTPHKCRGSAKPGNSNLYST-CLEBPKFTIGMDLEFTENYDFKAIFIILL 663  
 VTYIILTFUILLNMALMGETVQGVSKESKHIWK 736  
 LAYVITYIILNMALMGETVSKIAQESKSIWK 700  
 CAPSAICIN RECEPTOR AND CAPSAICIN RECEPTOR - RELATED  
 POLYPEPTIDES AND USES THEREOF  
 RESULT 6  
 Sequence 2 Application US/09235451  
 GENERAL INFORMATION:  
 APPLICANT: Caterina, Michael J.  
 APPLICANT: Brake, Anthony J.  
 TITLE OF INVENTION: CAPSAICIN RECEPTOR AND CAPSAICIN RECEPTOR - RELATED  
 POLYPEPTIDES AND USES THEREOF  
 FILE REFERENCE: 9076/084CIP



Db 436 FNFFVYCLYMIIFTAAAYRPVVEGLPPYKLNKNTVGDYFRVTGEILSVSGGYFFFRCIQ- 494  
 Qy 532 LFMKKGCPGVNSLFDGSFOLLYPTYSVLLIVVSAALYLAGIEAYLAVNMFALVGMNMY 591  
 Db 495 YFLORRPSIKSLPVDVSSEBILFVQSLMVLVSQRKEVYASHVFLAMGWNTMLY 554  
 Qy 592 FTRGLKLGTGTYSIMIOKILKFLKFPLFELVYLFLMIGYASALNSLNCANMKVCNEDQTN 651  
 Db 555 YTFQFOQMGIYAWMEKMLDLCRFMFLVLFGRATAVTLI-----EDGKN 604  
 Qy 652 CTVP---TYPSCRDS-----ETFSFLDLPLKUTIGMDLEMSSTKYPPVFILL 699  
 Db 605 NSLPMESTPHKCRGSACKPGNSYNLSLT-CLELFKTTIGMDLEFTENYDFKAVENTL 663  
 Qy 700 VTYIILTFVLLINMLIAALMGETVQVSXESKSHIWKLQ 736  
 Db 664 LAVLITYLILINMLIAALMGETVQIAOBSKNIWKLQ 700

RESULT 9  
 US-09-978-303-2  
 Sequence 2, Application US/09978303  
 PATENT NO. 6790629  
 GENERAL INFORMATION:  
 APPLICANT: Julius, David J.  
 APPLICANT: Brake, Anthony J.  
 APPLICANT: Caterina, Michael J.  
 TITLE OF INVENTION: Nucleic acid sequences encoding  
 capsaicin receptor and capsaicin receptor-related  
 polypeptides and uses thereof  
 TITLE OF INVENTION: capsaicin receptor and uses thereof  
 FILE REFERENCE: UCAL084CON  
 CURRENT APPLICATION NUMBER: US/09/978,303  
 CURRENT FILING DATE: 2001-10-15  
 PRIOR APPLICATION NUMBER: 09/235,451  
 PRIOR FILING DATE: 1999-01-22  
 PRIOR APPLICATION NUMBER: 60/072,151  
 PRIOR FILING DATE: 1998-01-22  
 PRIOR APPLICATION NUMBER: 08/915,461  
 PRIOR FILING DATE: 1997-08-20  
 NUMBER OF SEQ ID NOS: 48  
 SEQ ID NO 2  
 SOFTWARE: FastSEQ For Windows Version 4.0  
 LENGTH: 838  
 TYPE: PRT  
 ORGANISM: R. rattus  
 US-09-978-303-2

Query Match 40.9%; Score 1579.5; DB 2; Length 838;  
 Best Local Similarity 44.6%; Pred. No. 3.6e-141; Indels 97; Gaps 16;  
 Matches 338; Conservative 129; Mismatches 193;

Qy 16 AELPGDESGTGPGB-----APLSSLANLPEGEDSSLSPADA 54  
 Db 5 ASLDSEESSEPSQENSLDDPDRDNPKCCKPPVKPHIFTSRTRFL GKGDSSEASPLDC 63  
 Qy 55 SRPAGPQDRPNLRMKFOAQRKGVPN-PIDLBESTLYESSVPGPKKAPMDSLFDYGT 113  
 Db 64 PYEG-----GLASCPITVSSVLU---TIQRPSDP-----ASV 94  
 Qy 114 RHSSDNKRWKRIIEKOPQSKPAPAPOPPPLKVNPNRILFDIVSRGSTADLGJLPPF 173  
 Db 95 RPSSQDS-----VSAGEKPP--RLYDRSIRPDAVAGSNQBLESSLPPFL 136

Qy 174 LTHKKRATDEEFREPSTSKTCPLKALINLNGRNNDTPVLLDIAERTGMMREFINSPPRD 233  
 Db 137 QRERKRRATDSEFDPEPSKTCPLKAMINLNGNDTALLDVARKTDSDQFVNASYTD 196

Qy 234 IYRGOTAHIAIERRKHYELLVLAQGARDVIAQARGRFQPKDCEGYFYFCELPDSLAA 293  
 Db 197 SYKKGOTAHIAIERRNMTLVLVENGADYQAANGDFKKTGKREGFYFCELPDSLAA 256

Qy 294 CTRNQPHITYNLTENPHKADMRSQDSRGNNTVHALVATADNTRENTKFVTRMHDLLKC 353

Db 257 CTNQLAIKVKEFLQNSQOPADISARDVGNTVLHALVEADNTVDTNTKFVTSMYNEILIG 316  
 Qy 354 ARLFPSDSLBAVANNDGLSPLIMMAAKTGKIGIQLQHJURREVTDDETRHLSRKFKDWAYGP 413  
 Db 317 AKLHPPTKRLBETNRQGLTPALASISGKGVLAYLQRTIHEPCRHLRSRKFTMWAYGP 376  
 Qy 414 VYSSLYDLSSEDTGCBEAUSLILY--NSCKLENHMLAEPINBLLRDKWRKGAVSFY 472  
 Db 377 VHSSUDLSCDTC-DEKNSVLEIAVSSSETPNRNDMLYEPLNPLQDQWDREKFYRIFY 435  
 Qy 473 INVSSTLCAMVYFTLTAAYQPLEGTPYPTRTV-DYLRLAGEVITLFTGVLFPTNIKD 531  
 Db 436 PNFFVYCLYMIIFTAAAYRVEGLEPYKLNKNTVGYFRTGEILSVSGGYFPRGIQ- 494  
 Qy 532 LFMKKGCPGVNSLFDGSFOLLYFITYSVLVTVAALYLAGIEAYLAVMFALVGMNAY 591  
 Db 495 YFLQRPSPSLKSFLVVDYSESEILFFVQLEMLVSVWLYFSQREKEYVASMVEISLAMGWTNMLY 554  
 Qy 592 FTRGLKLGTGYSIMIOKILKFLKFPLVYLFLMIGYASALSVLNPACAMKVCNEDQTN 651  
 Db 555 YTRGFQMGFIYAVMFBKMLDLCRMFVLYFPLRSTAVTLI-----EDGKN 604  
 Qy 652 CTVP---TYPSCRDS-----ETFSFLDLPLKUTIGMDLEMSSTKYPPVFILL 699  
 Db 605 NSLPMESTPHKCRGSACKPGNSYNLSLT-CLELFKTTIGMDLEFTENYDFKAVENTL 663  
 Qy 700 VTYIILTFVLLINMLIAALMGETVQVSXESKSHIWKLQ 736  
 Db 664 LAVLITYLILINMLIAALMGETVQIAOBSKNIWKLQ 700

RESULT 10  
 US-10-246-435-9  
 Sequence 9, Application US/10246435  
 Patent No. 6867009  
 GENERAL INFORMATION:  
 APPLICANT: Copyright, Daniel  
 APPLICANT: Krause, James  
 TITLE OF INVENTION: Human Capsaicin Receptor and Uses Thereof  
 FILE REFERENCE: HCR  
 CURRENT APPLICATION NUMBER: US/10/246,435  
 CURRENT FILING DATE: 2002-09-18  
 PRIOR APPLICATION NUMBER: US/09/667,422  
 PRIOR FILING DATE: 2001-06-07  
 NUMBER OF SEQ ID NOS: 13  
 SOFTWARE: Patent In Ver. 2.0  
 SEQ ID NO 9  
 LENGTH: 838  
 TYPE: PRT  
 ORGANISM: Rattus sp.  
 PUBLICATION INFORMATION:  
 AUTHORS: Caterina, Michael J.  
 AUTHORS: Schumacher, Mark A.  
 AUTHORS: Tominaga, Makoto  
 AUTHORS: Rosen, Tobias A.  
 TITLE: The capsaicin receptor: a heat-activated ion channel in  
 JOURNAL: Nature  
 VOLUME: 389  
 PAGES: 816-824  
 DATE: 1997  
 US-10-246-435-9

Query Match 40.9%; Score 1579.5; DB 2; Length 838;  
 Best Local Similarity 44.6%; Pred. No. 3.6e-141; Indels 193; Mismatches 129; Miematches 193; InDelB 97; Gaps 16;  
 Matches 338; Conservative 129; Mismatches 193; InDelB 97; Gaps 16;  
 Qy 16 AELPGDESGTGPGB-----APLSSLANLPEGEDSSLSPADA 54  
 Db 5 ASLDSEESSEPSQENSLDDPDRDNPKCCKPPVKPHIFTSRTRFL GKGDSSEASPLDC 63  
 Qy 114 RHSSDNKRWKRIIEKOPQSKPAPAPOPPPLKVNPNRILFDIVSRGSTADLGJLPPF 173  
 Db 95 RPSSQDS-----VSAGEKPP--RLYDRSIRPDAVAGSNQBLESSLPPFL 136  
 Qy 174 LTHKKRATDEEFREPSTSKTCPLKALINLNGRNNDTPVLLDIAERTGMMREFINSPPRD 233  
 Db 137 QRERKRRATDSEFDPEPSKTCPLKAMINLNGNDTALLDVARKTDSDQFVNASYTD 196  
 Qy 234 IYRGOTAHIAIERRKHYELLVLAQGARDVIAQARGRFQPKDCEGYFYFCELPDSLAA 293  
 Db 197 SYKKGOTAHIAIERRNMTLVLVENGADYQAANGDFKKTGKREGFYFCELPDSLAA 256  
 Qy 294 CTRNQPHITYNLTENPHKADMRSQDSRGNNTVHALVATADNTRENTKFVTRMHDLLKC 353



OPERATING SYSTEM: DOS  
 SOFTWARE: FabSeq for Windows Version 2.0  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/09/197,636  
 FILING DATE: 23-NOV-1998  
 CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: UK 9805137.8  
 FILING DATE: 12-MAR-1998  
 APPLICATION NUMBER: UK 9815791.0  
 FILING DATE: 21-JUL-1998  
 APPLICATION NUMBER: UK 9819278.4  
 FILING DATE: 03-SEP-1998  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Prestia, Paul F  
 REGISTRATION NUMBER: 23,031  
 TELECOMMUNICATION INFORMATION: GP-30075  
 TELEPHONE: 601-407-0700  
 TELEX: 846169  
 INFORMATION FOR SEQ ID NO: 2:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 839 amino acids  
 TYPE: amino acid  
 STRANDEDNESS: Single  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein

us-09-197-636-2

Query Match 40.4%; Score 1557.5; DB 2; Length 839;  
 Best Local Similarity 44.5%; Pred. No. 4-139;  
 Matches 321; Conservative 138; Mismatches 188; Indels 74; Gaps 12;

Qy 49 PSPADASRPGPDGRPNL----RMKFQG-----AFRKGVNPIDLLES-TLYESSY 95  
 Db 22 PDPDGDPNSRPPAKIQLSTAKSRTLREFKGKDSEEFAPVPCPHEEGELDSCTPTIVSPV 81  
 Qy 96 V-----PGKCAPMDSLFDGYTRHSSDNKRWRKKLIEKOPOSPKAPAPOPPPLIKVF 149  
 Db 82 ITTQRPGDGTGARL-----LSQDPSVAASSTEKTFLRLY 113  
 Qy 150 NRPLILEDIVSRGSTADLGLLPELTHKKRKLTDDEFREPSTGKTCPLKALLNSGRNDT 209  
 Db 114 DRSIFEAQVNQCDQESLFLQSKKHLTDNEFQDPETKTCPLKAMNLHDQNT 173  
 Qy 210 IPIVLDIAERTGMNREFINSPFDIYRGQTALHAIERCKHYELLVAQADHQAQR 269  
 Db 174 IPILLEAQTQDSLKEVNASYTDSYKQGQTALHAIERRNMAVTLVENGADYQAAAH 233  
 Qy 270 GREFQPKDGGYFYFGELPLSLAACTNQPHINYLTENPHCKADMRODSRGNTVLAHVY 329  
 Db 234 GDFFKKTKRGPFGYFGELPLSLAACTNQGLIVKFLLOWSQADISARDSGNTVLAHV 293  
 Qy 330 ALADNTRENTKEVTKYMDLLKCARLFPSNSLEAVLNNDGSLPLSMLMAAKTGKIGFOHQI 389  
 Db 294 EVADNTADNTKEVTSWYNEILITIGAKLHPTEELTNKGKNTPLALAATGKGIVLAY 508  
 Qy 413 MLVEPINELLDKWRKRGAVSFYINVSYLCAMVIFTLATTAYQPLEGTPPYPRFTVDY 508  
 Db 390 IRREVTDTRHLSRKFKDWAQPVSSLYDLSLDTGGEASVLELLVY-NSKLENRHI 448  
 Db 354 LQEIQEPCRHLRKETWEAQGPVHESLSDYLDSCIDTC-EKNSVLEIASSETNRHD 412  
 Qy 449 MLAYPEPINELLDKWRKRGAVSFYINVSYLCAMVIFTLATTAYQPLEGTPPYPRFTVDY 508  
 Db 413 MLVEPINELLDKWRKRGAVSFYINVSYLCAMVIFTLATTAYQPLEGTPPYPRFTVDY 508  
 Qy 509 LRLAGEVITLFGVLFPTNIKDLFMKCKPVGNSLFLDGSSOLLYFLYTSVLYVSAALYL 568  
 Db 473 FRTGEILSUVGYYFFRRGIQ-YFLQRRPSKUQFQSLPMLATVVLYF 531  
 Qy 569 AGIEAYLAVMVFAVLGMMNALYPTTRGLKLGTGYSIMQKILPKDOLFRLLVYLLPMIG 628  
 Db 532 SHLKEYVASMVSFLAUGHTNMLYYTRQGQMGYAWMIEKMLRDLCREMPVTVPLFGF 591

RESULT 13  
 US-09-197-636-8  
 ; Sequence 8, Application US/09197636  
 ; Patent No. 6239267  
 ; GENERAL INFORMATION:  
 ; APPLICANT: DUCKWORTH, DAVID  
 ; APPLICANT: HAYES, PHILIP  
 ; APPLICANT: MEADOWS, HELLEN  
 ; APPLICANT: DAVIS, JOHN  
 ; TITLE OF INVENTION: NOVEL COMPOUNDS  
 ; NUMBER OF SEQUENCES: 8  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Partner & Prestia  
 ; STREET: P.O. Box 980  
 ; CITY: Valley Forge  
 ; STATE: PA  
 ; COUNTRY: US  
 ; ZIP: 19482-0980  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Diskette  
 ; COMPUTER: IBM Compatible  
 ; OPERATING SYSTEM: DOS  
 ; SOFTWARE: FASTSEQ for Windows Version 2.0  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/09/197 636  
 ; FILING DATE: 23-NOV-1998  
 ; CLASSIFICATION:  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: UK 9805137.8  
 ; FILING DATE: 12-MAR-1998  
 ; APPLICATION NUMBER: UK 9815791.0  
 ; FILING DATE: 21-JUL-1998  
 ; APPLICATION NUMBER: UK 9819278.4  
 ; FILING DATE: 03-SEP-1998  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: prestia, paul f  
 ; REGISTRATION NUMBER: 23,031  
 ; REFERENCE/DOCKET NUMBER: GP-30075  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: 601-407-0700  
 ; TELEFAX: 610-407-0701  
 ; TELEX: 846169  
 ; INFORMATION FOR SEQ ID NO: 8:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 839 amino acids  
 ; TYPE: amino acid  
 ; STRANDEDNESS: Single  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: protein

Query Match 40.3%; Score 1556.5; DB 2; Length 839;  
 Best Local Similarity 44.5%; Pred. No. 5-6-139;  
 Matches 321; Conservative 138; Mismatches 188; Indels 74; Gaps 12;

Qy 49 PSPADASRPGDGRPNL----RMKFQG-----AFRKGVNPIDLLES-TLYESSY 95  
 Db 22 PDPDGDPNSRPPAKIQLSTAKSRTLREFKGKDSEEFAPVPCPHEEGELDSCTPTIVSPV 81

96 V-----PGPKAPMDSLFDYGYRHSSDNKRWKIIIEKOPQSPKAPAPQPPPLIKV 149  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Db 82 ITIQRPGDGPPTGARL-----LSDSVAASSTEKTIRLY 113  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Qy 150 NRPILFDIVSRGSTADLGLLPFLTHKKRKLTDDEFREPSTGSKTCLPKALNLNSGRNDT 209  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Db 114 DRRSIEAVQAQNCCDLESSLLPLQSKKHLTDNEFKDPEGTGKTCLLKAMINLHDGNTT 173  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Qy 210 IPIVLDIAERTGCMNREFTNSPDIYRGQTALHIAFERRCKHYVELLAQGADVHQAR 269  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 IPILLETAQDTSLELKVNASTDSYTKGQTALHIAFERRNMALTVLVEANGDVQAAH 233  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Db 174 GRFPQPKDGGYYFGELPLSLACTNQPHINYTLNPHEKKADMARQDSRNTVHALV 329  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 GDFKKTGKRGPGYFGELPLSLACTNQLGIVKFLQNSWQTAISARDSVGNTVHALV 293  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Qy 270 1ADNTTRENTKFWTYKMDYLILKCARLFPSDNLEAVLNNDGLSLPLMAAKTGKIGFOHQI 389  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Db 294 EVADNTADNTKFTSMNELLIGAKUHTPLKBEITLNKGTMPLAAGTGKIGVAYI 353  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Qy 390 IRREVTDDETRHLRSRKFKDWAYGPVYSSYLDLSSLPFGEEAVLTVLTVY-NSKIERNHE 448  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Db 354 LOREIQEPCERLSRKFTEWAKGPVHSYLDLSCIDTC-EKNSVLETVAYSSSETPNRHD 412  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Qy 449 MLLAVEPINELLRDKWRKEGAVSPYINVSYLCRMVIFTPLQPLEGTPPYPYRITVVDY 508  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Db 413 MLLVEPLNRLQDKWDRTVKRIFYENFLVYCLYMIIFTMAYAYRPVDPGLPPKMBKTGDX 472  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Qy 509 LRLAGEVITLFLGTVLFFFTNIKDLFLMKKCPGVNSLFLDGSFOLLYFLYVSAALYL 568  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Db 473 FRTEGEILSVLGAGVYFFPRGIQ-YFLQRPSKMTLFDYSDSMLFLQSLMFLATVLYF 531  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Qy 569 AGLEAYLAVMVPAVLVLSMMNALYFTRGKLUKTGTYSIMIQKILKFOLFLRYVLLFMIGY 628  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Db 532 SHLKEYAVSMVFSLAQGTTNNLYYTRGFQOMGYIAYVNTEKMLRDLCRMPFYVVPELFGP 591  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Qy 629 ASALVSLINPCANNMKVCNBDFINCTVPPY-----PSCRDSET----FETFLIDLFK 675  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Db 592 SPAVTLI-----EDGKNDLSLSESTSRRWGPACRPDDSYNSNLIST-CLEFLK 640  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Qy 676 LTIGMGDLLEMSSSTKYPVFILLTYTILTEFLVLLNMLIALMGETVQVSKEKSHIWKL 735  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Db 641 FTIGMGDLFETENYDFKAVFILLAYTILTYTILLNMLIALMGETVNKIAOBESKNIWL 700  
 : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
 Qy 736 Q 736  
 Db 701 Q 701

RESULT 14  
 US-09-235-451-34  
 GENERAL INFORMATION:  
 / FILE REFERENCE: 9076/08CIP  
 / CURRENT FILING DATE: 1999-01-22  
 / PRIOR APPLICATION NUMBER: US/09/235,451  
 / PRIORITY: Julius, David J.  
 / APPLICANT: Brake, Anthony J.  
 / TITLE OF INVENTION: CAPSAICIN RECEPTOR AND CAPSAICIN RECEPTOR - RELATED POLYPEPTIDES, AND USES THEREOF  
 / TITLE OF INVENTION: CAPSAICIN RECEPTOR AND CAPSAICIN RECEPTOR - RELATED POLYPEPTIDES, AND USES THEREOF  
 / SEQUENCE ID NO: 34  
 / LENGTH: 839  
 / TYPE: PRT  
 / ORGANISM: Homo sapiens  
 / SEQ ID NO: 34  
 / PRIORITY: US-09-235-451-34  
 / CURRENT APPLICATION NUMBER: US/09/978,303  
 / CURRENT FILING DATE: 2001-10-15  
 / PRIOR APPLICATION NUMBER: 09/235,451

RESULT 15  
 US-09-978-303-34  
 / Sequence No. 34, Application US/09978303  
 / Patent No. 6790629  
 / GENERAL INFORMATION:  
 / APPLICANT: Caterina, Michael J.  
 / APPLICANT: Brake, Anthony J.  
 / TITLE OF INVENTION: Nucleic acid sequences encoding capsaicin receptor and capsaicin receptor-related polypeptides and uses thereof  
 / FILE REFERENCE: UCAL084CON  
 / CURRENT APPLICATION NUMBER: US/09/978,303  
 / CURRENT FILING DATE: 2001-10-15  
 / PRIOR APPLICATION NUMBER: 09/235,451

PRIOR FILING DATE: 1999-01-22  
 PRIOR APPLICATION NUMBER: 60/072,151  
 PRIOR FILING DATE: 1998-01-22  
 PRIOR APPLICATION NUMBER: 08/915,461  
 PRIOR FILING DATE: 1997-08-20  
 NUMBER OF SEQ ID NOs: 48  
 SOFTWARE: FastSEQ for Windows Version 4.0  
 SEQ ID NO: 34  
 LENGTH: 839  
 TYPE: PRT  
 ORGANISM: Homo sapiens  
 US-09-978-303-34

	Query Match	Score	Length
Best Local Similarity	40.3%	839	
Matches	321; Conservative	44.5%; Pred. No. 5.6e-139; Mismatches 188; Indels 74; Gaps 12;	
Qy	49 PSPADASRPGPDGRPNL-----RMKFQG-----AFRKGVNPIDLLES-TLYESSV 95		
Db	22 PDPDGDNSRPPAKPOLSTAKSRTLRFLKGDSSEAPVDCPHEBGBLDSCPTITVSPV 81		
Qy	96 V-----PGPKKAPMDSLPDYTYRHSSDNKRWKKIIERQPSKAPAOOPPPPLKVF 149		
Db	82 ITIQRPGHGTGARL-----LSQDSVAASTEKTILRV 113		
Qy	150 NRPILFDIVSRGSTDLDGLLPPFLTHKRLTDDEFPSTGTCFLPKALNLNSGRNDT 209		
Db	114 DRSSIFEAQNNCQDLESLLFQSKSKHLDTNENFKDPEKTKCLIKAMNLHDQNT 173		
Qy	210 IPVLDIAERTGNMREFINSPRDIYRGQTALHIAERCKHYVELLAQGADVHAQAR 269		
Db	174 IPULLEIARTQDSLKELVNASITDSYXKGQTALHIAERTRNMAVTLVENGADVQAAAH 233		
Qy	270 GRFPQPKDEGGFYFGELPLSLAACTNQPHINYLTENPHKKADMRRQDSRONTVLHALV 329		
Db	234 GDFPKKTKGRGPQFYFGELPLSLAACTNQLGIYKFLQNSQTAIDARSYSNTVLHALV 293		
Qy	330 AIAADNTRENTKVKYMDFLLLKCARLDPDSNEAVLNNGISPLAMAATKGKIGLFQH 389		
Db	294 EVADNTADNTKFTMSYMEILIGAKLHPTKLELTNKGMTPALAGTGKIGLVAYI 353		
Qy	390 IRREVTDEDTRHLSRKPKDWAYGPVSYSLYDLSLDTGEEASVLETLYV-NSKLENHIE 448		
Db	354 LQEIQEPBCRHLRSRKPTEWAYGPVHSYLYDLSLSDCIPIC-EKNSVLEVIASSETPNRD 412		
Qy	449 MLAVEPTINELLADKWKREGAVSFYINVSYLCAMVITPLTAYQPLEGTPPYPRITVDY 508		
Db	413 MLLVEPLNRLQDKWDRVKRIFYFNFLVYCLXMIITMTAAVYRPDVGLPFKMBCTGDX 472		
Qy	509 LRLAGBVTLFPGVLFPTNIKDLFMKCGVNSLFDGSFLPFLYTSVLSVSAALYL 568		
Db	473 FRYTGEILSVLGSVYFFRGIQ-YFLQRRPSMKTLYDTSYSTEMLFFQSLFMLATVLYF 531		
Qy	569 AGIBAVIΛVΜΡΑVΛΜΡΑVΛΜΝΑΛΥFTRGIKLGTGΤΥΣΙΜΙΟΚΤΙΚΟΛΦΡΕΛΥΛΙΜΙΓΥ 628		
Db	532 SHLKEYVΑSΜΒΣLΑLΓΗΝΜΛΥTRGQMGTYΑWΛΕΜΙLRDLCRMEFVVVFPGF 591		
Qy	629 ASILVSLINPCAMMKVQNEDQPNCTVY-----PSGRDSET---PSTFLLDLFX 675		
Db	592 STAVVTLI-----EDGKNDSLPSSESTSRRWRPACRPDPSSYNSYST-CUELFK 640		
Qy	676 LTIGMDILEMSSSTKPVVFILLVTVIILTPVLLNMLJALMGETVNGOVSKESKIWL 735		
Db	641 FITIGMDULEFTENYDFKAΦVΦΙΙΛΛΑVΛΙΤΥΙΛΛΑMΛMΛGETVNKAΦEKSNIWL 700		
Qy	736 Q 736		
Db	701 Q 701		